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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,191	07/28/2000	Dirk M. Beyer	10001529-1	3159

22879 7590 12/03/2003

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EXAMINER

VAN DOREN, BETH

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 12/03/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/626,191

Applicant(s)

BEYER ET AL.

Examiner

Beth Van Doren

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-10,13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-10,13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a Final Office Action in response to communications received on 09/23/03. Claims 1-4, 10, and 12-13 have been amended. Claims 6-7, 11, and 14 have been canceled. Claims 1-5, 8-10, 13, and 15 are now pending in this application.

Response to Amendment

2. Applicant's cancellation of claims 7 and 14 are sufficient to overcome the claim objections set forth in the previous office action.
3. Applicant's amendment to claim 3 and cancellation of claim 11 are sufficient to overcome the 35 USC § 112, second paragraph, rejections set forth in the previous office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-10, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Technology Strategy, Inc. (www.grossprofit.com).

The following references describe the different features of the service performed by Technology Strategy, Inc.:

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- i. Screenshots of www.grossprofit.com, which is Technology Strategy, Inc.'s homepage (referred to herein as references A);
- ii. Article "Looking Back to Fashion's Future" by Ackerman from The Boston Globe (referred to herein as reference B);
- iv. Article "Merchants Try Complex Math Tools to Improve Inventory Decisions" by Koloszyc from Stores Magazine (referred to herein as reference C).

5. As per claim 1, Technology Strategy, Inc. teaches a product demand forecasting system, comprising:

a profile extractor that generates a demand profile of a new product yet to be introduced based on demand profiles of similar products already introduced, wherein the profile extractor uses statistics and simulation on the demand profiles of similar products to obtain the demand profile of the new product (See reference A, page 3, sections 1 and 2, and page 4, sections 2 and 3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, wherein a profile extractor takes and stores historical demand data of similar products already introduced to market and stores this data as the baseline for the new product to be introduced to market);

a life-cycle demand predictor that generates a total life-cycle demand of the new product based on historical demand data of the similar products (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3,

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sections 1-3, wherein a life-cycle demand predictor portion generates total life-cycle demand for the new product based on historical demand of similar products);

a forecast creator coupled to the profile extractor and the demand predictor to generate a life-cycle demand forecast for the new product based on the demand profile and total life-cycle demand of the new product (See reference A, page 3, section 2, and page 4, sections 2-3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1 and 3-8, and page 3, sections 1-5, wherein a forecast creator is coupled to the other portions to generate a life-cycle demand forecast for the new product based on the demand profile and the total life-cycle demand determined. The forecast creator is used to assess the life span of the product and pricing strategies associated with the product and is updated during this life span); and

a future demand extrapolation module coupled to the forecast creator to extrapolate the total life-cycle demand of a new product by calculating an average demand per time period of each of the similar products, associating each average demand per time period with a date that represents points of the similar products' life-cycle, and calculating an estimate of the average demand per time period at the date of the point of the life-cycle of the new product (See reference A, page 3, sections 1 and 2, page 4, sections 2 and 3, and page 5, section 1, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1-3, page 2, sections 1 and 3-8, and page 3, sections 1-5, wherein historical demand data is obtained for the company's external database for relevant products similar to the new product. Future demand is estimated from values within a known range by assuming that the estimated values follow logically from the known values of demand. The run-rate of each of the similar products is

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calculated, the run-rate associated with dates in the season of the products life-cycle. This life cycle is plotted as a curve in a graph of points and an estimate of the run-rate is estimated for a date at a point on this life-cycle curve).

However, while Technology Strategy, Inc. uses simulation, such as Monte Carlo simulations, and statistics to determine the demand profile, Technology Strategy, Inc. does not expressly disclose normalizing and averaging the demand profiles. Also, while Technology Strategy, Inc. discloses plotting points on a life-cycle graph for the life cycle of a product during a season and determining the timing of when to perform markdowns using this plot, it does not specifically disclose that one of these points is a midpoint with a specific date.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as mathematical manipulation in determining a demand profile for a new product. It is old and well known that simulations, such as Monte Carlo simulations, normalize and average historical data to generate values for uncertain future situations. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to average and normalize the data of Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

Furthermore, Technology Strategy, Inc. is a tool used to predict the life-cycle demand of a product by looking at historical data of similar products. The tool plots forecasts of future demands and uses this plot (with points) to determine the timing of markdowns during the season of the product based on the product's run-rate. The tool assesses the product's performance on specific dates by comparing actual performance to predicted performance on the graph

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine a midpoint with an associated specific date for the product in order to more accurately reach the targeted goals of the season by establishing specific dates and performance which need to be met in order to reach the overall goal. See reference C, page 2 and page 3, section 4.

6. As per claim 2, Technology Strategy, Inc. discloses a product demand forecasting system, wherein the profile extractor further comprises:

a relevant product selection module that selects the similar products and extracts the historical demand data of the similar products from an external historical demand database (See reference A, page 3, sections 1 and 2, page 4, sections 2 and 3, and page 5, section 1, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, wherein historical demand data is obtained for the company's external database for relevant products similar to the new product); and

a module that calculates the demand profile of each of the similar products to obtain the demand profile of the new product using simulation, statistics, and other mathematical manipulations (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3, sections 1-3, wherein data mining, genetic optimization, mathematical modeling, and Monte Carlo simulations are used to determine demand profiles).

However, Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that normalizes the demand profile and averages all the normalized demand profiles.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as mathematical manipulation in determining a demand profile for a new product. It is old and well known that simulations, such as Monte Carlo simulations, and statistics normalize and average historical data to generate values for uncertain future situations. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to average and normalize the data of Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

7. As per claim 3, Technology Strategy, Inc. discloses a product demand forecasting system, wherein the module calculates the demand profiles of the similar products for their lengths of life and total life-cycle demands (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3, sections 1-3).

However, Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that normalizes the demand profiles of the similar products for their lengths of life and total life-cycle demands.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as mathematical manipulation in determining a demand profile for a new product. It is old and well known that simulations, such as Monte Carlo simulations, and statistics normalize

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historical data to generate values for uncertain future situations. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to normalize the data of Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

8. As per claim 4, Technology Strategy, Inc. teaches a product demand forecasting system wherein the module:

discretizing each profile at a pre-specified number of equidistant points between the beginning and end of the life-cycle of each demand profile (See reference A, page 4, section 3, reference B, page 1, section 1, page 2, section 4, page 3, section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, and page 3, sections 3-5, wherein the profile has discrete information at a pre-defined number of points on the life-cycle graph. The points are tested for example weekly against the numbers of the prediction and these equidistant points reveal if the prediction and the real situation are matching up); and

performing simulations and mathematical manipulations on the historical data and demand profiles of the similar products (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3, sections 1-3, wherein data mining, genetic optimization, mathematical modeling, and Monte Carlo simulations are used to determine demand profiles using the data of the similar products).

However, Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that includes calculating the empirical mean and the

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empirical standard deviation of all the profiles at these equidistant points to yield an averaged demand profile as the demand profile of the new product.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as statistical analysis to determine a demand profile for a product. It is old and well known that simulations, such as Monte Carlo simulations, and statistics normalize and analyze historical data to generate values for uncertain future situations. Empirical means and empirical standard deviations are also old and well-known in simulations and statistics. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to normalize and average the data of Technology Strategy, Inc. as well as determine the empirical mean and standard deviation in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

9. As per claim 5, Technology Strategy, Inc. teaches a product demand forecasting system wherein the module performs simulations and mathematical manipulations on the historical data and demand profiles (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3, sections 1-3, wherein data mining, genetic optimization, mathematical modeling, and Monte Carlo simulations are used to determine demand profiles).

However, Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that estimates variance information of the normalized and averaged demand profiles.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as statistical analysis to determine a demand profile for a product. It is old and well known that simulations, such as Monte Carlo simulations, and statistics normalize and analyze historical data to generate values for uncertain future situations. Determining variance information is also old and well-known in simulations and statistics. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to normalize and average the data of Technology Strategy, Inc. as well as determine the variance in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

12. As per claim 8, Technology Strategy, Inc. discloses a product demand forecasting system further comprising an updating module that provides a revised new total life-cycle demand estimate using (1) the total life-cycle demand of the similar product, (2) the demand profile of the new product, and (3) past demand information, when available, of the new product (See reference A, page 3, section 2, and page 4, section 3, reference B, page 1, section 1, page 2, sections 3-4, page 3, section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, page 3, sections 3-5, wherein updating occurs).

13. As per claim 9, Technology Strategy, Inc. teaches a product demand forecasting system wherein the forecast creator is also coupled to the updating module such that if the forecast creator receives the revised new total life-cycle demand estimate, the forecast creator uses the revised new total life-cycle demand estimate instead of the total life-cycle demand from the life-cycle demand predictor to calculate the life-cycle demand forecast (See reference A, page 3, section 2, and page 4, section 3, reference B, page 1, section 1, page 2, sections 3-4, page 3,

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section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, page 3, sections 3-5).

14. As per claim 10, Technology Strategy, Inc. discloses a method for providing a life-cycle product demand forecast for a new product yet to be introduced, comprising:

collecting historical demand data of similar products of the new product, wherein the similar product have already been introduced (See reference A, page 3, sections 1 and 2, and page 4, sections 2 and 3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, wherein historical demand data is found and stored for similar products already introduced to market);

generating demand profiles of the similar products based on the historical data of the similar products (See reference A, page 3, sections 1 and 2, and page 4, sections 2 and 3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, wherein the demand profiles of the similar products are generated using the stored historical data);

running simulations and statistics on the demand profiles of the similar products to obtain a demand profile of the new product (See reference A, page 3, sections 1 and 2, and page 4, sections 2 and 3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, wherein simulations and statistics are applied to the demand profiles of the similar products);

generating a total life-cycle demand of the new product based on the historical demand data of the similar products (See reference A, page 3, section 2, page 4, sections 1-3, and page 5, section 1, reference B, page 2, sections 1, 3, and 4, and page 3, section 1, and reference C, page

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1, sections 1-3, page 2, sections 1, 3, and 4-8, and page 3, sections 1-3, which discloses generating a total life-cycle demand for the new product based on historical demand of similar products); and

generating the life-cycle product demand forecast for the new product based on the demand profile and total life-cycle demand of the new product (See reference A, page 3, section 2, and page 4, sections 2-3, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, sections 1-3, page 2, sections 1 and 3-8, and page 3, sections 1-5, which discloses generating a life-cycle product demand forecast for the new product based on the demand profile and the total life-cycle demand determined. The life span of the product is assessed in the context of product and pricing strategies associated with the product. These strategies are updated during this life span);

wherein generating the total life-cycle demand of the new product comprises calculating an average demand per time period of each of the similar products, associating each average demand per time period with a date that represents points of the similar products' life-cycle, and using the average demand profile per time period at a date of the life-cycle of each similar product to calculate an estimate of the average demand per time period at a point of the life-cycle of the new product (See reference A, page 3, sections 1 and 2, page 4, sections 2 and 3, and page 5, section 1, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1-3, page 2, sections 1 and 3-8, and page 3, sections 1-5, wherein historical demand data is obtained for the company's external database for relevant products similar to the new product. Future demand is estimated from values within a known range by assuming that the estimated values follow logically from the known values of demand. The run-rate of each of the similar

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products is calculated, the run-rate associated with dates in the season of the products life-cycle. This life cycle is plotted as a curve in a graph of points and an estimate of the run-rate is estimated for a date at a point on this life-cycle curve).

However, while Technology Strategy, Inc. uses simulation, such as Monte Carlo simulations, and statistics to determine the demand profile, Technology Strategy, Inc. does not expressly disclose normalizing and averaging the demand profiles. Also, while Technology Strategy, Inc. discloses plotting points on a life-cycle graph for the life cycle of a product during a season and determining the timing of when to perform markdowns using this plot, it does not specifically disclose that one of these points is a midpoint with a specific date.

Technology Strategy, Inc. teaches using simulation, such as the Monte Carlo simulation, as well as mathematical manipulation in determining a demand profile for a new product. It is old and well known that simulations, such as Monte Carlo simulations, normalize and average historical data to generate values for uncertain future situations. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to average and normalize the data of Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques that cause the more accurate prediction of values.

Furthermore, Technology Strategy, Inc. is a tool used to predict the life-cycle demand of a product by looking at historical data of similar products. The tool plots forecasts of future demands and uses this plot (with points) to determine the timing of markdowns during the season of the product based on the product's run-rate. The tool assesses the product's performance on specific dates by comparing actual performance to predicted performance on the graph

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine a midpoint with an associated specific date for the product in order to more accurately reach the targeted goals of the season by establishing specific dates and performance which need to be met in order to reach the overall goal. See reference C, page 2 and page 3, section 4.

15. As per claims 12 and 13, claims 12 and 13 are method versions of the system of claims 4 and 5, respectively. Therefore, claims 12 and 13 are rejected using the same art and rationale relied upon in the rejection of claims 4 and 5, respectively.

16. As per claim 15, Technology Strategy, Inc. teaches a method further comprising:

determining if past demand information of the new product is available (See reference A, page 3, section 2, and page 4, section 3, reference B, page 1, section 1, page 2, sections 3-4, page 3, section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, page 3, sections 3-5, wherein the availability of past data is considered);

if the past demand information of the new product is available, then providing a revised new total life-cycle demand estimate using (1) the total life-cycle demand of the similar product, (2) the demand profile of the new product, and (3) past demand information, when available, of the new product (See reference A, page 3, section 2, and page 4, section 3, reference B, page 1, section 1, page 2, sections 3-4, page 3, section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, page 3, sections 3-5, wherein updating occurs when the past demand information is available).

Response to Arguments

17. Applicant's arguments with regards to the rejections based on Technology Strategy, Inc. (www.grossprofit.com, "Looking Back to Fashion's Future" by Ackerman, and "Merchants Try Complex Math Tools to Improve Inventory Decisions" by Koloszyk) have been fully considered but they are not persuasive. In the remarks, Applicant's argue that Technology Strategy, Inc. does not teach or suggest (1) the demand extrapolation module as claimed, (2) a relevant product selection module that selects the similar products, (3) the limitations of claim 4, (4) variance information of the normalized and averaged demand profiles, (5) a revised new total life-cycle demand estimate, (6) the elements of claim 10, (7) the features and limitations of claim 15, and Applicant has also asked the Examiner (8) to provide a reference to support the contention that it is "old and well known" to normalize and average demand profiles of similar products.

In response to argument (1) of the Applicant, Examiner respectfully disagrees. Examiner reminds the Applicant that this limitation was rejected under 35 USC § 103 and that she asserted that Technology Strategy, Inc. teaches a demand extrapolation module that "extrapolate[s] the total life-cycle demand of a new product by calculating an average demand per time period of each of the similar products, associating each average demand per time period with a date that represents points of the similar products' life-cycle, and calculating an estimate of the average demand per time period at the date of the point of the life-cycle of the new product". See at least reference A, page 3, sections 1 and 2, page 4, sections 2 and 3, and page 5, section 1, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1-3, page 2, sections 1 and 3-8, and page 3, sections 1-5, wherein historical demand data is obtained for relevant products similar to the new product. Future demand is estimated from values within a

known range by assuming that the estimated values follow logically from the known values of demand. The run-rate of each of the similar products is calculated, the run-rate associated with dates in the season of the products life-cycle. This life cycle is plotted as a curve in a graph of points and an estimate of the run-rate is estimated for a date at a point on this life-cycle curve. Examiner also stated that Technology Strategy, Inc. does not expressly disclose that one of these points is a midpoint with a specific date, but that it would have been obvious to one of ordinary skill in the art at the time of the invention to determine a midpoint with an associated specific date for the product in order to more accurately reach the targeted goals of the season by establishing specific dates and performance which need to be met in order to reach the overall goal. See reference C, page 2 and page 3, section 4. Examiner maintains this rejection.

In response to argument (2) of the Applicant, Examiner respectfully disagrees. Examiner points out that in at least reference A, page 3, sections 1 and 2, page 4, sections 2 and 3, and page 5, section 1, reference B, page 2, sections 3 and 4, and page 3, section 1, and reference C, page 1, section 1, page 2, sections 1 and 5, and page 3, sections 2 and 3, Technology Strategy, Inc. selects relevant products similar to the new product and obtains historical demand data for these relevant products. As recited, the module “selects the similar products and extracts the historical demand data”, but there is no explicit recitation of how this selection occurs or how the data is extracted. Therefore, Technology Strategy, Inc. does teach and suggest this limitation as recited.

In response to argument (3) of the Applicant, Examiner respectfully disagrees. Examiner points out that this claim was rejected under 35 USC § 103. Examiner has asserted that Technology Strategy, Inc. teaches, as set forth above, that the profile has discrete information at a pre-defined number of points on the life-cycle graph. The points are tested for example weekly

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against the numbers of the prediction and these equidistant points reveal if the prediction and the real situation are matching up. Simulations and mathematical manipulations (data mining, genetic optimization, mathematical modeling, and Monte Carlo simulations) are performed on the historical data and demand profiles of the data obtained about the similar products. Examiner stated that Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that includes calculating the empirical mean and the empirical standard deviation of all the profiles at these equidistant points to yield an averaged demand profile as the demand profile of the new product, but asserted that it would have been obvious to one of ordinary skill in the art at the time of the invention to include these features in Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques. Examiner maintains this rejection.

In response to argument (4) of the Applicant, Examiner respectfully disagrees. Examiner points out that this claim was rejected under 35 USC § 103. Examiner has asserted that Technology Strategy, Inc. teaches a product demand forecasting system wherein the module performs simulations and mathematical manipulations on the historical data and demand profiles. Examiner further asserted that Technology Strategy, Inc. does not expressly disclose a demand normalization and average profile determination module that estimates variance information of the normalized and averaged demand profiles, but since it is old and well known that simulations, such as Monte Carlo simulations, and statistics normalize and analyze historical data to generate values for uncertain future situations and determine variance information, it would have been obvious to one of ordinary skill in the art at the time of the invention to normalize and

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average the data of Technology Strategy, Inc. as well as determine the variance in order to more accurately predict future situations. Examiner maintains this rejection.

In response to argument (5) of the Applicant, Examiner respectfully disagrees.

Technology Strategy, Inc. discloses using the total life-cycle demand of the similar product, the demand profile generated of the new product, and past demand information (such as performance and selling history, etc.) to update and revise the total life-cycle demand estimate in at least reference A, page 3, section 2, and page 4, section 3, reference B, page 1, section 1, page 2, sections 3-4, page 3, section 1, and reference C, page 1, sections 1 and 3, page 2, sections 1, 3-5, and 8, page 3, sections 3-5. Technology Strategy, Inc. discusses taking the above-mentioned data into respect during the run of the product to update the plan for the product during the season.

In response to argument (6) of the Applicant, Examiner respectfully disagrees and points out that the limitations argued with respect to claim 10 are similar to the limitations discussed above in the response to argument (1). Therefore, Examiner reasserts the response to argument 1 and the rejection and rationale set forth above.

In response to argument (7) of the Applicant, Examiner respectfully disagrees. Examiner asserted above that Technology Strategy, Inc. disclosed determining if past demand data related to the new product is available, and if so, updating the new total life-cycle demand estimate using the total life-cycle demand of the similar product, the demand profile of the new product, and the past demand information, when available, of the new product. Technology Strategy, Inc. discusses taking the above-mentioned data into respect during the run of the product to update the plan for the product during the season.

In response to Applicants request (8) to provide a reference to support the contention that it is “old and well known” to normalize and average demand profiles of similar products, Examiner points out to the Applicant that she did not state that it was old and well known to normalize and average demand profiles of similar products, but instead used the statement “it is old and well known that simulations, such as Monte Carlo simulations, normalize and average historical data to generate values for uncertain future situations” as support for her obviousness assertion. Therefore, this “old and well known” statement was used in conjunction with Examiner’s assertion that since Technology Strategy, Inc. uses simulation (such as Monte Carlo simulation) and mathematical manipulation to determine a demand profile for a new product, it would have been obvious to one of ordinary skill in the art at the time of the invention to average and normalize the data of Technology Strategy, Inc. in order to more accurately predict future situations by using old and well-known simulation and statistical techniques. Examiner maintains that averaging and normalizing data is old and well known in simulation. See at least Mendenhall et al., pages 29-46 and 696-710, which discloses modeling and using this modeling for normalizing and averaging data sets. Therefore, Examiner maintains that it would be obvious to combine these features with the simulations in the teachings of Technology Strategy, Inc.

Conclusion

18. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Landvater (U.S. 6,609,101) teaches a system for product planning in a retail environment which includes planning for new products.

Ando (U.S. 6,032,125) discloses a demand forecasting method that studies the fluctuation in trends of retail sales and builds a demand model using past data to predict future needs.

Dulaney et al. (U.S. 6,341,269) discloses inventory management systems that plans based on past data and future expectations.

Dietrich et al. (U.S. 6,032,121) discloses a system for proactive planning that at least accounts for real time changes and revises plans.

Shipman (U.S. 5,819,232) discloses a system that uses historic data for inventory planning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd

bvd

November 20, 2003



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